

Ultimatons, internal electron geometry, and related mysteries

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abstract: One might try to use cosmic superstrings, with Fourier modes that can be defined to travel at speeds approaching infinity, in order to model the ultimatons, and thereby perhaps gain further mathematical ideas of how our Creator has used ultimatons to create physical, morontial, and spiritual reality! The 100 unique energy organizations or forms that morontia materials are constructed from, are themselves constructed from ultimatons [541D],[467D][†], and may resemble quarks. We are told that physical world electrons are each constructed from 100 or fewer ultimatons [476D], and we will see in this report that the morontia reality tachyonic subtle- e^+ (similar to the subtle- e^- within our neutron) is constructed from the tiny emergent-energy-ocean whirlpool/vertex, anyon/overtone ultimatons as well. The ultimatons, when super-anyon, can travel faster than light, and has a phase-cycle that explains why the morontia forms and why another or midway sector of physical reality, are completely invisible to us [502A,D, 861D, 2023B, and 2027A]. The ultimatons are the first measurable form of energy, and has Paradise as its nucleus [467D], but the actual link to Paradise and the Central Isle is through the Master Physical Controllers, the Morontia Power Supervisors, the Paradise Force Organizers, and the Master Frandalanks that are responsible and capable intelligences located in their main Control Centers and Capitals, and who communicate by instantaneous gravity-circuits across these vast distances from each ultimatons [260-266].

key words: subtle particles, EM-1, EM-2, EM-3, Higgs field, midway invisibility, morontia mathematics {1227A}, prana, morontia reality {2029}, the mansion worlds {174C}, {509B},...

1 neutrinos, gravitons, (the electrons’)-tachyons, and ultimatons

What we might for brevity call “particles”, viz. neutrinos, gravitons, tachyons, and ultimatons of any velocity, are actually not (spherical field) particles! What they are, could be called, “energy interactions between” our 7D personal-experience space and the mind-grid, because these interactions form an additional 3D beyond our 7D, that has the important purpose of maintaining life forms in Creation, #15 in [1]. These ‘particles’ define the *subtle* system (the so-called shadow system in [1]), which is a classification system similar to but different from the particle/anti-particle classification system [ibid]. Here, I do not consider that the ultimatons, as a subtle particle, itself has mass¹, because it needs to be able to travel at any speed, below c , at c , and above c , with a minimum of modifications. Not only that, but it may need to have any spin, i.e. any rotational velocity, positive or negative, where the reversed rotation begins the creation of the positron, instead of the

¹We already know that the single ultimatons is not responsive to linear gravity, but responds only to Paradise gravity [476C].

electron. This to me means that even the superluminal ultimatons' rotational-structure that forms within the powerful background of puissant emergent energy [470A,474D], must be an anyon² (so, is not a boson or a fermion), because it is formed with these rotations in both sound and light, and hence obeys the extended anyon equation (#42 in [1])

$$\text{wavelength } \lambda = \frac{\text{wave speed in the emergent energy}}{\text{ultimaton rotation frequency } \omega} \quad (1)$$

which also turns out to be approximately the ultimatons' size or its tiny 'spherical' diameter within the already very small electron volume. We can therefore compute an average value for λ using wavespeed = the speed of light c and the upper limit for any atom's existence as 10^{33} Hz $\Rightarrow 4.14 \times 10^6$ TeV ([1], #5), getting $\lambda \approx c/10^{33} \doteq 3 \times 10^{-23}$ cm. And the electron's actual approximate diameter [477A] works out to be about 4×10^{-19} cm, or more than 10,000 times larger than the ultimatons of this wavelength. If $\omega = 0$, then the ultimatons will fail to be an anyon.

So this is what the Urantia Book, page 474D, means by "minute spheres of the ultimatons", even though as long as the ultimatons are anyons, it is a 'subtle particle' that is whirlpool-like, even when $v > c$. Eventually, in section 9 below, we will be able to take an electron that is constructed from 100 ultimatons, but which has never been formed into an atomic system, and then take the neutrinos that this electron yields when it comes apart, to form prana, a very useful energy field or fluid around the Earth. The electron forms from 100 ultimatons that all spin or whirl in the same direction, but a positron must form from 100 ultimatons that whirl in the opposite direction, where the attraction-field that draws the 100 ultimatons in together, to begin electron or positron formation, is not the standard electro-weak field, but is more like the electromagnetic, but gravity-like, force field within the atomic nucleus, which some people have called EM-3 [1], #176.

"EM-1 is just the Maxwell field within the physical world, EM-2 belongs only to inverse space or the etheric, and EM-3 is also in the morontia reality, called the astral. However, EM-2, as the magnetic vector potential field, is dynamic, and so is in transition. But EM-3 achieves a condition of stability, for example inside of subatomic or quark/anti-quark fields." (from [1], #176)

Why did I say only "begin electron formation"? Well, it's because the 100 ultimatons that are slowing down, descending in both linear and rotational velocities, as an electron or a positron is to be formed, must all together produce or project zero spin within the space or at the point where the particle mass is to exist, creating and using there a local Higgs field.

So, the 100 or fewer anyonic ultimatons are spaced on some kind of tiny lattice within the particle to have Higgs-mechanism mass, which must be sufficient to create an approximate Higgs potential field somewhere within the electron or similar particle.

What about any repelling force between an ultimatons and oppositely-rotating ultimatons? Well, this would exist in EM-3, which has a gravity-like forcefield attraction and repulsion, i.e. is not a 4-component field like electromagnetism, EM-1. But the completed electron and positron still attract one another via their completed electromagnetic fields, with the same relative strengths as electron-electron repulsion, because I think that these electromagnetic forces would not be able to be modified by any significant negative ultimatons force, principally because the powerful attraction between both types due to the natural "mighty-tensioned" [470A] density of emergent puissant energy would seem to dominate here, almost like no negative EM-3 force at all, for both electron and positron, as in Fig.1 below. But of course there are no pre-made polyhedral positions; the ultimatons must create their own positions through resonance and waves. Also, any anti-particle in

²"Anyon" is a name that physicists coined many years ago for the subluminal situation, but for the present have lost sight of. The transcripts [1] use the term, "ohnon", to study along with photon and phonon, #45, but the transcriber misspelled anyon as "anion". Transcript #287 (added to #220) introduces the superluminal overtone structure of the (ultimatons)-anyon; explained below in section 14 and Appendix 2.

this dimension, like the positron example here, can be said to be only a temporary subtle particle, but a necessary one ([1], #8 and #15). Whenever some aspect of this model needs experimental

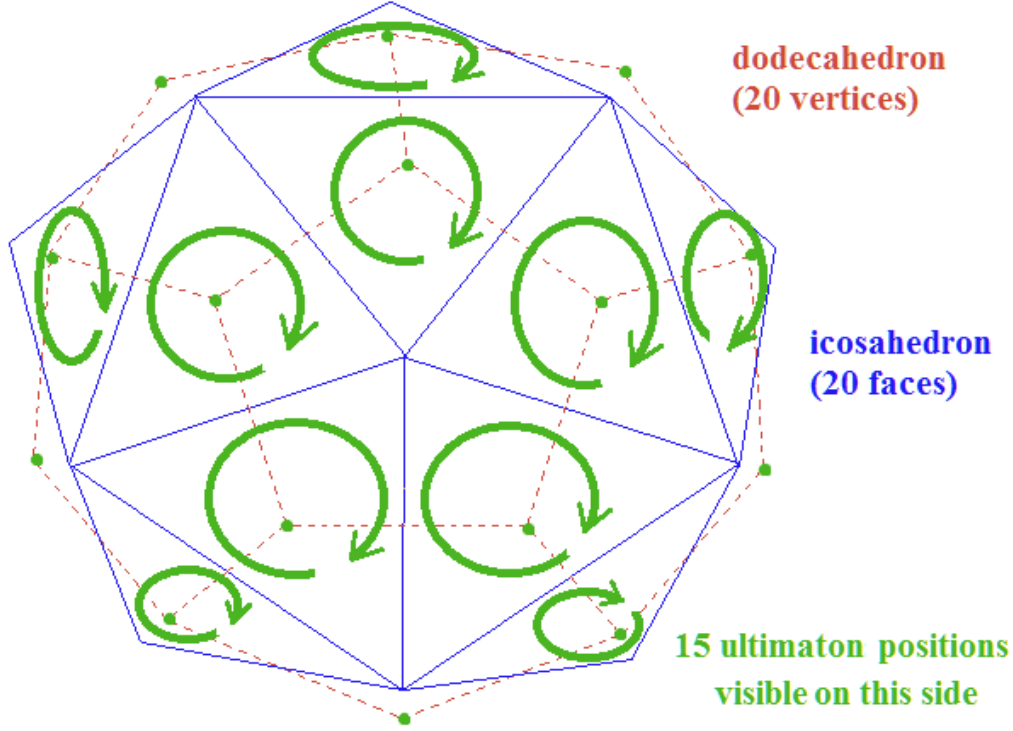


Figure 1: Positioning 100 ultimatons, i.e. 20, five times similarly (since in section 5 we will extend the polyhedra 5 times in 7-dimensions), can only use 20 Platonic positions each time, i.e. the icosahedron (and dodecahedron), since they would give exactly the same 20 ultimaton positions, where icosahedral whirlpools would \longrightarrow dodecahedral vertices, if ever $\omega \rightarrow 0$ (may never happen).

testing, one approach might be to design a sufficiently sensitive experiment to look for any difference in strength between electron-to-positron force and the electron-to-electron force. The ultimaton Rule that we finally adopt in section 14 for $\omega \rightarrow 0$ of eq.(1) is that, if $v > c$ then holds, then ultimaton 2Dface positions become instead the vertex ultimaton positions of the dual polyhedron.

2 Preparing to build physical and morontia realities, using primary light vortices, and the subtle system ‘particles’

The actual physical matter particles are: the proton, the positron, the electron, and the tachyon that is a subtle type of electron, such as the one within the neutron [1], #15. All particles and subtle ‘particles’ can be used to build both the physical world’s elements and the 100 unique energy organizations that morontia materials are constructed from [541D], as follows: We have explained in section 1 how each free electron, that is not part of an atom, can be induced to split into a dual primary light vortex, like that drawn in Fig.2, that has both neutrinos (imploding while accumulating energy_j) and antineutrinos (exploding while accumulating force_j), thus needing the two types of vortices. Whereas the energy-momentum tensor in physical spacetime and the information-form tensor in morontia reality give you the primary mathematical handles in each of

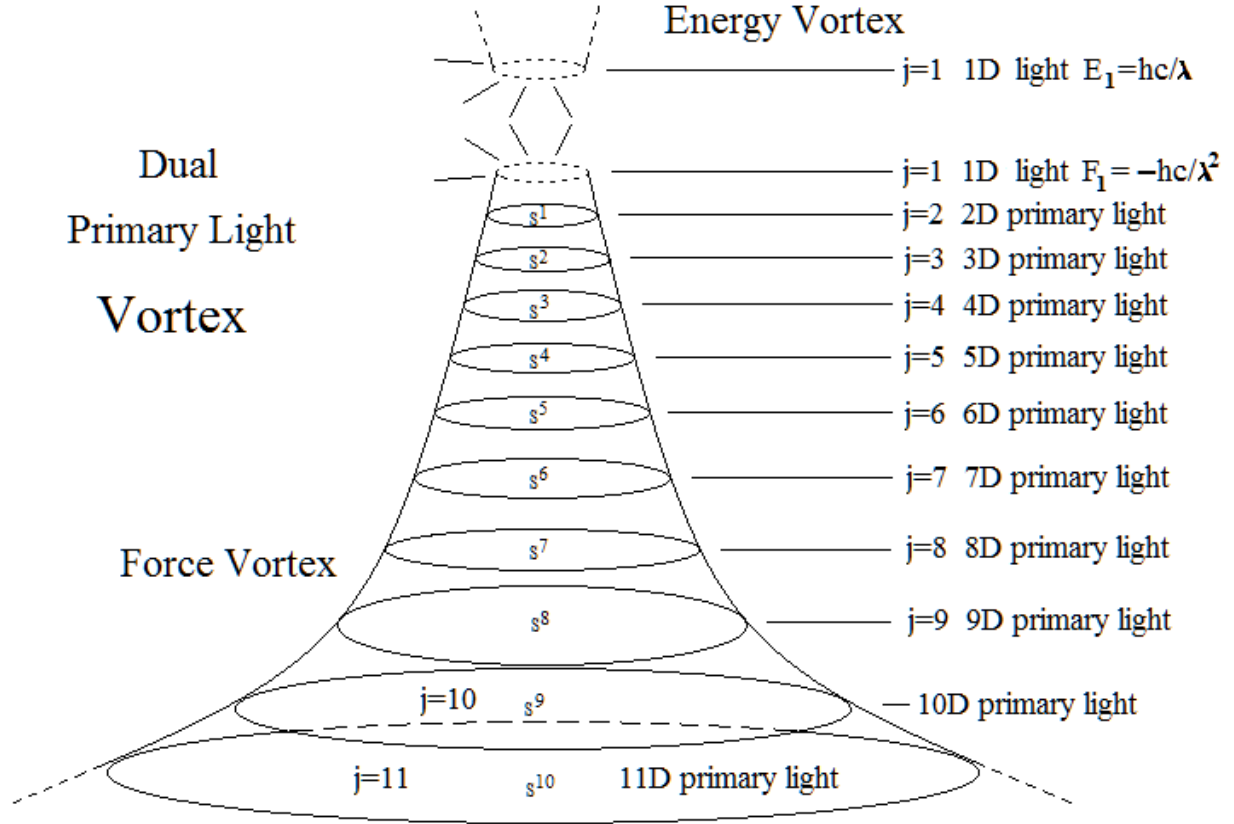


Figure 2: One half of the primary light dual vortex in superspace, defined by the sequence of equation (2) [2], as constantly computed by the elemental beings [328], and section 11 below.

these regions, the corresponding pair or tensor in supernal or superspace the Urantia Book reader will realize [49D, 169, 469, 1149C] is simply $\{\text{energy}_j, \text{force}_j\}$, where $j = 1, 2, \dots$ gives the order of the primary light if $j = 1$ corresponds to ordinary light of wavelength λ , c is the speed of light, and h is Planck's constant. The reader can check that if K is a certain constant having units of cm^2 , that a primary light vortex, such as diagramed in Fig.2, is produced by the sequence [2]

$$\{E_j, F_j\} = K^{j-1} (2j-2)! \frac{hc}{\lambda^{2j-1}} \left\{ 1, -\frac{2j-1}{\lambda} \right\} \quad j = 1, 2, 3, \dots \quad (2)$$

where one finds that $K \approx 7.20364657372 \times 10^6 \text{ cm}^2$ ([4], p.36).

Morontia reality is within inverse space of the antimatter universe (#159 of [1]), but its 'positron' (a tachyonic form) appears in large numbers in morontians' auras, so might essentially be the positron version of the tachyonic subtle electron within our neutron. As a tachyonic subtle 'particle', this modified 'positron' then we would expect to be like a modified 'electron' in having less than 100 ultimatons, because this is how the very small number of higher-dimensional or superconducting modified electrons are within a mortal's aura. In section 6 we finally are able to propose the physical world ultimatonic structure of the ordinary electron using the 3D Platonic solids, and indeed this also suggests the ultimatonic structure of the ordinary or 100-ultimatonic morontia reality 'positron'. Then, using this experience, in section 7 we are able to propose a similar geometric 4D structure solution even for the ten modified physical electrons, and probably even for the same

number of modified ‘positrons’ in the morontia. Using 4D, rather than 3D, is a little more difficult mathematically, but we think that we have solved it (see section 7). One has to match whatever number of ultimatons it has to the possible ultimatons positions in some of the regular geometries that exist, reaching up to cosmic 7D, by first deciding how the Platonic geometries should reach each of these dimensions. Of course, this is for the auras of the physical and morontia bodies, but the nature of the more solid portion of the morontia body has been described as our future “silicon/selenium/germanium type of solid-to-ionic form and body” (#15 in [1]). The dual subtle system “is used to create the morontia realities (color), which is static forms whirling in circles” (i.e. the primary light vortices of Fig.2). The Archangel transcripts [1] describes this as follows³: “The astral is merely a place or a world, or a place of vibrations created in color. It must be activated or filled with individuals. This is where the nature of the psychic body is included.” (from #66 of [1]). But upgraded and translated into Urantia Book language, this essentially says: “The morontia reality is a world of higher sound and color. This is due to the auras of everyone there, and to the natures of their morontia bodies!” (see also Appendix 2 below)

3 Entanglement, seeing gravitons as tachyons, and divinely-made neutrino structure modifications[‡]

The tachyon component of any folded-11D (see Fig.3) subtle ‘particle’ causes entanglement because of structure-cycling within any solution of 11D Einstein field equations, and turns out to be allied with the graviton. This actually amounts to a tachyonic version of quantum mechanics in folded-11D as follows. From $\{\bar{E}_0, \bar{F}_0\} = \{hc/\lambda, -hc/\lambda^2\}$, as a slightly-different form of (2), in the morontia reality with morontial time variable T [3], that is independent of our physical-world time variable t , beginning with $\bar{E}_0 = hc/\lambda = ht^{-1}$ and alternately differentiating in t and then integrating in T to essentially undo each differentiation in t , on the 2D manifold of t and T , effectively bypasses K of (2) and its grid-associated K' [5], and leads to folded-11D wave equation energy operators for structure-cycling as follows.

So the first or $j = 1$ step of t -differentiation, followed by T -integration, gives us $\bar{E}_1 = -hTt^{-2}$. Doing this again for $j = 2$ gives $\bar{E}_2 = hT^2t^{-3}$. Repeating this procedure indefinitely thus leads to a series of energy expressions

$$\bar{E}_j = (-1)^j h \frac{T^j}{t^{j+1}} \quad \text{implying the}$$

$$\text{series } S = -\frac{T}{t^2} + \frac{T^2}{t^3} - \frac{T^3}{t^4} \pm \dots$$

The elementary summation formula for S is easily found to be

$$S = -\frac{\frac{1}{t^2}T}{1 + \frac{T}{t}} = -\frac{\frac{1}{t^2}T}{\sqrt{1 - \frac{c'^2}{v^2}}} \quad (3)$$

which uses the result [3] that $(\frac{c'}{v})^2 + (\frac{T}{t} + 1)^2 = 1$.

Moving onward to the tachyonic wave equation that this implies, we use the operator correspondences

$$\frac{h}{t} \rightarrow i\hbar \frac{\partial}{\partial t}, \quad \frac{h}{\lambda} \rightarrow -i\hbar \nabla, \quad T \rightarrow 2\pi i \int (...)dT$$

³Actually, this description of the astral [the morontia] was contributed in these transcripts by Hautl, an ancient Incan, formerly from Peru.

to write h times S of (3), first in the form

$$\bar{V} \equiv \sum_{j=0}^{\infty} \bar{E}_j = \frac{h}{t} - \frac{\frac{hc}{\lambda^2} T}{\sqrt{1 - \frac{c'^2}{v^2}}},$$

then the tachyonic stochastic wave equation is

$$i\hbar \frac{\partial}{\partial t} \Psi = i\beta \frac{2mc^2}{\sqrt{1 - \frac{c'^2}{v^2}}} \nabla^2 \int \Psi dT + \bar{V} \Psi \quad (4)$$

where $\beta \equiv \hbar/(2m)$ defines the stochastic diffusion constant for the primary-field $\wp \times \wp'$ -stochastic process, and \bar{V} is a tachyon's *constant potential* that takes the place of a bradyon's rest mass energy. We also see that (4) is already in a relativistic form, without taking a Dirac square root, which is novel.

For example, the plane wave type of solution to (4) for a free tachyon is

$$\Psi(\mathbf{x}, t, T) \sim \exp i\{\mathbf{k} \cdot \mathbf{x} - \omega t - c|\mathbf{k}|T\},$$

which in (4) yields the plane wave energy relation

$$i\hbar \frac{1}{\Psi} \frac{\partial \Psi}{\partial t} = E = E_{\bar{V}} + E_{\text{K.E.}} = \bar{V} + \frac{\hbar c |\mathbf{k}|}{\sqrt{1 - \frac{c'^2}{v^2}}} \quad (5)$$

where $\hbar |\mathbf{k}|$ is the tachyon's *minimum (vel. ∞) momentum*.

In a tachyonic bound state, we expect the tachyon (massless and uncharged) to somehow go in nearly straight line orbits completely around the constant-curvature supernal space 3-sphere. If two direct-3D quantum states are connected by a tachyonic swath, then cyclic time T runs through both states from subparticle structure-cycling, and T 's path for a dual vortex runs effectively through both inverse spaces and the common supernal space. I.e., the tachyon's dynamical position produces a worldline that is actually a spacelike 'swath' of width = a line connecting two quantum states, where this line segment is also parameterized by T , which overall is cyclic time, running through all spaces and also producing entanglement. However, since the structure of the photon is given string-theoretically as 100,842 basic quanta of [6]

$$E_{\odot} \times 6\{7^5\} \doteq .32117810587 \text{ eV},$$

and we know that a photon + an antiphoton can produce a graviton, then the graviton will have fewer basic quanta than the photon, so must be a tachyon. In fact, the transcript #16 in [1] says that: "the subtle particle of the electron is the tachyon, and the subtle particle of the positron is the graviton." From Table 1 in section 9, both are cubes ("Earth")(8 vertices) with all mass = 0.

The real neutrinos, however, always travel with greater than light speed, $>c$, and are always composed of parallel electric and magnetic field lines that are defined when a primary light dual vortex is formed by created mass energy. E.g., from transcript #21 in [1], "the neutrino can be quantitative with regard to the fact that it produces (supernal) space, but it may also be purely energetic, as it produces mass. Neutrino may be another word for the basic structure of superspace. However, this structure is altered by the vortexal structure, neutrinos being the flow as these structures pulsate. Neutrino is the basic building block. However, its translation into mass and energy occurs through the vortexal structures, which then change the neutrino, which has a polarity based on direction in superspace (however, no charge) into a charge phenomenon within this (physical) dimension." (So, I think that God is the one who pulses these vortices, in changing the neutrino to produce something that perhaps would not otherwise happen, like Prana!)

4 Primary Field Lines, PFLs, are organized into grid systems (anu/neutrinos) that are produced and controlled by thought[‡]

PFLs don't just interact blindly creating everything in the small without first forming certain and very special multiple-PFL structures in the large. There seems to be a very special reason why such huge structures containing myriads of PFLs should need to be formed first, and this is an important Creator facet of the overall physical, morontia, and spiritual mathematical theory because this seems to be where Mind gains absolute control over everything. We can only give a few details here about the structure of these anu, neutrino, and isotron grid systems, which can be understood mathematically as certain maps back and forth between supernal space of the PFLs on the one hand, and the physical plus the morontia worlds and spirit realities on the other hand.

We next give the anu structures here for both matter and antimatter, as a type of map from superspace into physical space \oplus morontial (or inverse) space, and then discuss the inverse type of map that the neutrinos are (and the whole idea behind the isotrons or subquark biotrons). It turns out that the anu is just a spin form [7], as it is needed to actually define the spin function of all elementary particles, such as proton and antiproton, neutron and antineutron, electron and positron, all the mesons, etc. (listing here just a few of these main physical-world particles), plus all of the morontia (i.e. inverse-space of antimatter) world's information-carrying forms, with which we are not yet familiar (since we are still mortals). I.e., the anu is formed when seven of the PFLs are drawn down into a monopole by thought of the Creator, using a grid system in which there are seven closed lines in our physical world's direct space and three closed lines (doubled) in the morontial world's inverse space, where each twist in these closed lines moves across the spatial barrier into superspace. So the topology of the anu is identical to that of our DNA. We know, from the book on Occult Chemistry [8], for example that a hydrogen atom or a proton has just 18 anu in its structure. The anu does not bridge the energy gap between primary light and matter/antimatter. It is similar to the neutrino vortex equations, but for spin, rather than for charge, but not as easily subject to thought apparently. But what could neutrino and anu vortex structure involve now, using these new fluid viewpoints of the differential geometry, and life force or ULF symmetries? (It should be very interesting!)

To similarly understand the neutrino, whose seven direct space lines are instead open, but whose grid system is otherwise the same as that of the anu, we begin by stating that whereas the energy-momentum tensor leads to the most important mathematics for theoretical physics, and the information-form calculus appears to be most important for morontia mathematics, we find that considerations of force and 'mass'potential (or superchargepotential, or gravitypotential, or potential energy, or what Jesus called simply "space potential" [1439C]), are apparently what are most important for supernal space. The antineutrino always moves outward, accumulating force, whereas the neutrino always implodes, accumulating energy or 'mass'potential, because these together are what it takes to create a fundamental particle and continue to hold it together for its lifetime. The only created particles that must remain in supernal space with the neutrinos [6], are just the gravitons! (The ultimatons are in 7D + antimatter's 7D, while the biophotons are in $3\frac{1}{2}$ or 7D.) No experimental physicist will ever detect a gravity wave quantum in direct or inverse space, but all of the other fundamental creations, such as the bio/ordinary photon, must materialize within the physical and/or the morontial worlds.

We are mental creatures who will eventually master the present problems we are having with our planet through learning to properly use the universal mind-grids that are in higher-dimensional existence for just this purpose. Our accomplishments to date in this direction, however, may have fallen rather short of divine expectations. Even the theoretical concepts that over the centuries we

have thus far come to accept and to try to use to gain further understanding have fallen considerably short of the universal mark, and the real reasons for this actually appear to be related to how far off the mark our civilization presently is morally and spiritually.

5 Having both physical and morontial realities, but a rather remote supernal space, allows us to eventually personally experience seven cosmic dimensions

Since physical and morontial realities are separated only by energy barriers, it's practical to eventually live in a body in which we can experience both, or this full 6D. And personality, or a time-like

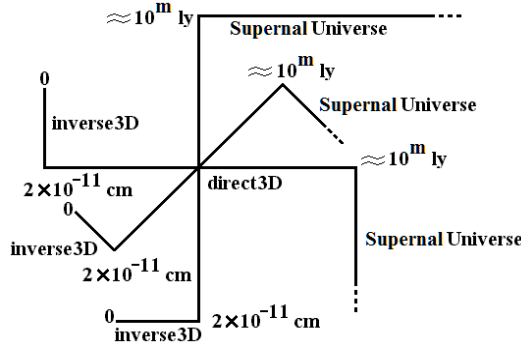


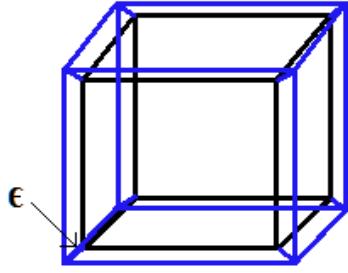
Figure 3: How to visualize folding each direct3space coordinate twice in and into 9D.[‡]

line between parallel realities of a time traveler, is a seventh variable [1226D],⁴ and apparently that's essentially all the dimensions that we can hope to live in for now. Fig.3 shows 9D space-like dimensions can be represented as being folded up, 3D at a time. This will convince the reader that the supernal or superspace dimensions cannot be included in this personal higher-D, because of the Abyss of size-difference between supernal space and the other two spaces. Nevertheless, the 9D of Fig.3 (keeping the 3D of superspace), plus two more time variables (one of physical reality and one of morontial reality) can add up to the 11D that many theoretical physicists work with daily.

6 How could an orderly approach always result in 100 ultimatonic positions within an ordinary electron?

The whole idea of constructing a self-repeatable 100-ultimaton structure in 3D for the electron seems to possibly produce electrons with highly variable or wildly differing structures, unless there exists some way that consistency would be reasonably ensured, such as the five 20-place positions of the icosahedron + dodecahedron Platonic solids, as we could have by extending Fig.1, 4 times by 1-dimension each time, using the additional 4D of cosmic 7D of section 5 above. Each 1D extension of the icosahedron (increasing its 20 faces) is similar to what is happening in Fig.4, and of course the whole idea of this is to use the Platonic geometries to provide *a kind of resonance in a higher type of sound* for the 100 positions of the ultimatoms. Choosing instead, for example, the 30-positions of the centers of the edges of these two polyhedra, is a case of more than 20 positions

⁴Although most time travelers I have read about do not realize that the look-alike on the next timeline that they visit, for themselves or one of their relatives, has a completely different personality than the person that they knew on their timeline of origin! (Any parallel reality they leave, can never be returned to while they are still mortal.)



One can think of a higher dimensional extension as being very close to the lines of the original edges

Figure 4: The problem of finding a repeating electronic spheroidal structure of 100 ultimatons, seems most likely to involve the geometries of some of the Platonic solids in 3D. Here we have a cube in 3D extended into 4D, merely to remind the reader how 1D-extensions work.

per polyhedron, but 30 doesn't divide evenly the 100 positions, as 20 does, so I presently know of no other combinations of Platonic geometries and over-all dimensions that would produce the 100 ultimaton positions in this way, as neatly as this one does.

Clearly 6-dimensions would not be sufficient, because only three 1D-extensions of the 20 faces of the icosahedron that begins in $\{x_1, x_2, x_3\}$, leads to at most four mutually-face-orthogonal icosahedra, such as $\{x_1, x_2, x_3\}$, $\{x_1, x_4, x_5\}$, $\{x_2, x_4, x_6\}$, $\{x_3, x_5, x_6\}$. But using cosmic 7D, and for example including the 1D-extension $\{x_3, x_4, x_7\}$ gets us to having five mutually-face-orthogonal icosahedra, and we see here that x_4 was used three times. So it follows that for non-permuted coordinates, there are many such mutually-face-orthogonal icosahedra in cosmic 7D. As the whirlpools of the 100 ultimatons form in the emergent energy ocean, sound resonance we think would choose one of these combinations of cosmic 7D coordinates (not yet letting them permute) for the equilibrium icosahedra face positions of an electron that's forming. All of these ultimatons have the same rotation direction, so on opposite icosahedron faces the whirlpools would be opposing one another, but the EM-3 attractive force, which we think is why ultimatons of the same spin direction attract one another, would keep these ultimatons in their icosahedral positions so that equalization of their spins could then make the spin zero at the very center. This is needed so that the Higgs field and the Higgs mechanism can form and function there to produce the electron mass at this single point.

The morontia reality 'positron' (defined in section 2) seems to need to have inverse space (i.e., the morontia space or Astral World in antimatter) and direct space change places in this higher-dimensional extending process for this internal positron geometry, but it is not that coming back to the physical for these extensions is quite the same for a morontia 'positron' because one of these 1D extensions can of course be the 7th dimension. Using the Pure Basic program "find5-7D.pb" [16] for starting always with $\{x_1, x_2, x_3\}$, the program says that six more non-permutational coordinates exist, viz.: $\{x_1, x_4, x_5\}$, $\{x_1, x_6, x_7\}$, $\{x_2, x_4, x_6\}$, $\{x_2, x_5, x_7\}$, $\{x_3, x_4, x_7\}$, $\{x_3, x_5, x_6\}$, so having to choose only four more from these six, gives you $6!/(4!2) = 15$ ways to do it. On the other hand, beginning in the morontia $\{x_4, x_5, x_6\}$, there exist then also just six more as 1D extensions in the cosmic 7D, viz.: $\{x_1, x_3, x_5\}$, $\{x_1, x_2, x_6\}$, $\{x_1, x_4, x_7\}$, $\{x_2, x_3, x_4\}$, $\{x_2, x_5, x_7\}$, $\{x_3, x_6, x_7\}$, or again 15 ways to do this. But is this the way that the 100 ultimatons would choose these icosahedral coordinates? (Assume for now that it is approximately the correct way.)

For 6-sphere radius R , its 7-volume $V_7 = \frac{16}{105}\pi^3 R^7$, and the inscribed icosahedron of edge length $a = 1$ and $R = \sin(72^\circ)$, has 3-volume $V_3 = \frac{5(3+\sqrt{5})}{12}a^3$, so we would like to have five of V_3 spaced apart by four 1D-extensions, each of length ϵ for the simplest match to V_7 . This would mean that

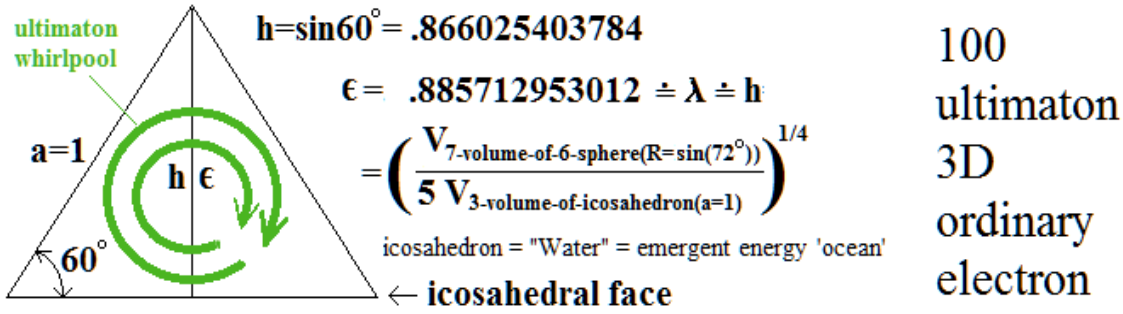


Figure 5: The simplest fit of the five icosahedra into cosmic 7D's 6-sphere, comes remarkably close to the ultimaton's anyon wavelength λ that we think is close to h .

approximately,

$$\left(\frac{V_7}{5V_3} \right)^{1/4} \doteq \epsilon, \text{ if } a = 1 \text{ and } R = \sin(72^\circ),$$

which yields the very useful approximate value $\epsilon \doteq .885712953012$ as illustrated in Fig.5.

Since we're now fairly sure that at least the subluminal ultimaton is an anyon, we recognize that here it is always operating with mass and energy. But in the inverse space that is the morontia, the tiny sphere of the ultimaton is always moving faster than light, and so it does everything that it does with only form and information, and it does this chiefly in a higher type of sound. In fact there may be little use of energies anywhere in the morontia, unless perhaps it is connected closely to the physical world such as during the beginning of morontia life for a recently-arrived individual from the cessation of their mortal life. But what about the very short wavelengths of cosmic rays that are far above those wavelengths produced electronically? Well, #15 of [1] says, "We now have a concept, not only of anti-particles, but now the double pairing of particles via the shadow-particles. That is, they now have shadow forms that are fairly energetic that are shells. These shells then break apart into vortexal structures which then are supported by the neutrino energies. Is this somewhat clear? There is a dual or shadow system. This literally creates the astral worlds [the morontia realities], or what you refer to as color. That is, they are static forms that are whirling in circles, as part of the control system [God's dual vortices]." What I tend to think of all of [1], is roughly, *what an unfeeling-like view of eternal life!*⁵ So, the ultimaton is a subtle or shadow grid-like anyon as part of this, that above the $10^{29}\text{Hz} = 414 \text{ TeV}$ neutrino ceiling [474C] comes hurtling into our atmosphere with up to $10^{33}\text{Hz} = 4.14 \times 10^6 \text{ TeV}$ vortexal energies [474-5] (that I assume are dual primary light vortices, like Fig.2 above).

7 Four dimensional modified electrons carry information in the auras of biosystems

We think that each of the 10 modified electrons [476D] might be higher-dimensional than the 3D of an ordinary electron, because it appears that it would be the most useful in a bio-system's aura

⁵There was one, Koh Lan Matellus [#54], who even believed that Jesus could not perform real miracles, but only used certain Atlantean crystals that he obtained in Tibet and Egypt, which he kept carefully hidden under his robes! That is, he believed nothing Jesus taught to everyone about his Divinity! About the time of such messages, the channel received in #43 the one claiming that things in the astral [the morontia] were essentially static, or unchanging through "eons of time"! So, I wondered if perhaps these were messages from one of the prison worlds of Jerusalem.

where its main function would be to carry information throughout the body of the bio-system since for example a 4D auric electron would be superconductive within the ordinary shell electrons of this body because of #39 in [1], which says, “The biophoton emits out [and this would be the tetrahedron of 4 non-paired sides, so no Higgs mass], and the force field pushing the electron in, creates forces inward. This electron is forced completely inward into 4D, where it can be reprogrammed and become a slightly different electron. So there is a 4D electron, as there is a 4D photon. This 4D electron may circulate within the biomolecule and transfer information. All the information necessary for healing and the transmutation of systems is contained, literally, within a few [modified] electrons. These are distributed superconductively through all of the electron shells.” So, examining the Platonic geometries in dimensions greater than 3D, we find that in 4D there are six, but in greater than 4D there are only three, but one of these might be useful to us. One of the six in 4D is the (4D) cross-polytope or 16-cell, made simply by drawing edges between each pair of vertices $(\pm 1, 0, 0, 0), (0, \pm 1, 0, 0), (0, 0, \pm 1, 0), (0, 0, 0, \pm 1)$, except omitting those that would pass through $(0,0,0,0)$. So the 2D faces of equilateral triangles number 32 in 4D, but $2^7 = 128$ in 5D. So, since we are coming down from 100 ultimatons here, only the 4D version could work.

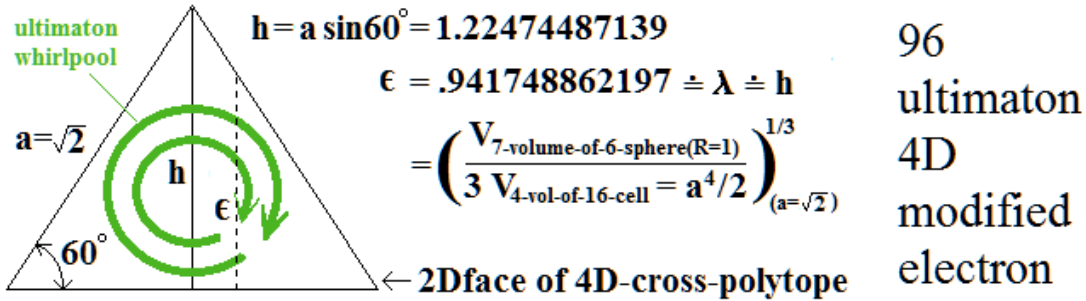


Figure 6: The simplest fit of the three 16-cells into cosmic 7D’s 6-sphere, also comes close to the ultimaton’s anyon wavelength λ , for each of the ten modified electrons (which here are each 4D, rather than 3D), since 3×32 2Dfaces = $96 \approx 100$ and tetrahedron (“Fire”) = the biophoton.

And since there would be 5 main 4D coordinates within the cosmic 7D (of the original electron), viz. $\{x_4, x_5, x_6, x_7\}, \{x_1, x_2, x_3, x_4\}, \{x_1, x_2, x_3, x_5\}, \{x_1, x_2, x_3, x_6\}, \{x_1, x_2, x_3, x_7\}$, and since only three of mutually-2Dface-orthogonal 16-cells, for a total of $3 \times 32 = 96$ ultimatons, would likely be what each 4D modified electron first becomes, leaving 4 ultimatons for the 3D tetrahedral biophoton, we find that

$$\binom{5}{3} \equiv \frac{5!}{3!2} = 10$$

gives the right number of such modified electron geometries in 4D. But how many non-permuted mutually-2Dface-orthogonal 16-cells could one such modified electron be?

Well, our use of the program [16] find5-7D.pb above, already gave us seven possible mutually-2Dface-orthogonal situations in 7D, but only four such situations in 6D (where both cases now occur, drawing upon three sets of the above five main coordinates), we have now that

$$\binom{7}{3} \equiv \frac{7!}{3!4!} = 35, \text{ plus } \binom{4}{3} = 4$$

different non-permuted-coordinate mutually-2Dface-orthogonal possibilities exist for each modified electron. This shows that 4D modified electrons would be a bit more statistical than the regular

electrons, because in more dimensions there can be additional variations of structure. But especially because of the results for the cases of ϵ/h of sections 9 and 10 below, we think that the result of the ϵ/h of this 4D modified electron structure, computed just below, would suggest that it also quickly becomes unstable if it remained as this 7D structure of three 4D cross-polytopes, which it however begins in 7D with, because it's much closer to the 7D structure of the ordinary electron.

For 6-sphere radius R , its 7-volume $V_7 = \frac{16}{105}\pi^3 R^7$, and the 4D-cross-polytope of edge length a (where $a/\sqrt{2} = R = 1$), has 4-volume $V_4 = \frac{1}{6}a^4$, so we would like to have three of V_4 involved with three 1D-extensions, each of length ϵa to fit up to V_7 . This will mean that approximately,

$$\left(\frac{V_7}{3V_4}\right)^{1/3} = \left(\frac{16}{105}\pi^3 R^7 / \frac{1}{2}a^4\right)^{1/3} = \left(\frac{16}{105}\pi^3 / 2\right)^{1/3} \doteq \sqrt{2}\epsilon, \text{ if } a/\sqrt{2} = R = 1,$$

which yields the approximate value $\epsilon \doteq .941748862197$ as illustrated in Fig.6. So $\epsilon/h \doteq .768934726076$ is perhaps not nearly as good for the modified electron, judging from our idea of the ultimatons wavelength, than $\epsilon/h \doteq 1.02273322369$ of Fig.5 for just the ordinary electron. However, another 4D structure exists for this modified electron with its 96 whirlpool ultimatons on a total of 96 2D-faces and with a total of $3 \times 8 = 24$ vertices (the 16-cell has 8 vertices)), which we expect that the modified 4D electron will quickly convert into. (We continue to assume that the 3D tetrahedral biophoton is stable, with no Higgs mass.)

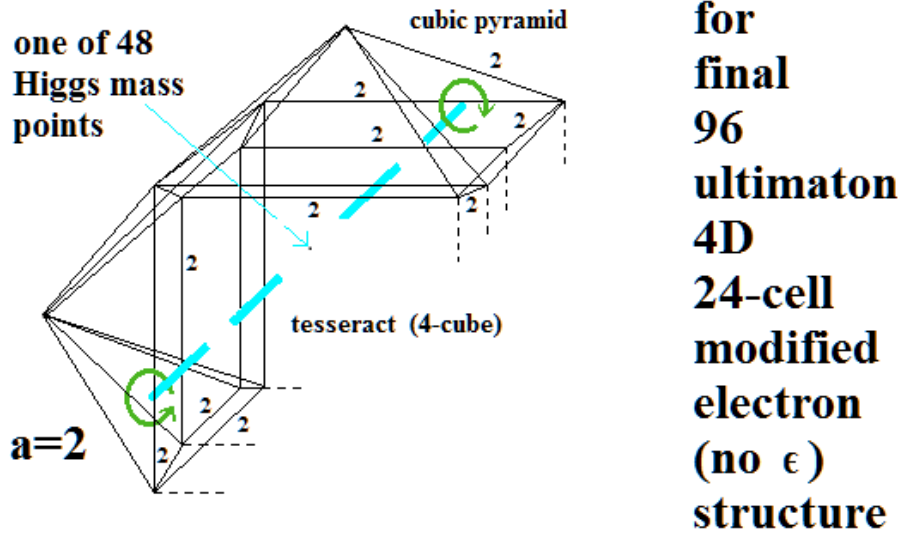


Figure 7: One can match 8 cubic pyramids to a tesseract (4-cube) to get the 24-cell or icositetrachoron, shown here only in the beginning of its structure. Beyond 2D, it is the only regular, convex, self-dual polytope that isn't also a simplex. It's the only one of the six convex regular 4-polytopes that's not directly related to one of the familiar five Platonic solids in 3D.

This next, preferred 4D 'Platonic structure' is called the 24-cell (meaning 24-octahedral-cell), or "icositetrachoron," or "xylochoron," is also one of the 6 convex regular 4-polytopes discovered in the mid 19th century by Swiss mathematician Ludwig Schläfli. Coordinates of the 24-cell, which has 96 equilateral triangular faces of side $a = 2$, are all permutations of $\{\pm 1, \pm 1, \pm 1, \pm 1\}$ and $\{\pm 2, 0, 0, 0\}$. We note that if a modified electron of 96 ultimatons did not first start out as one of the ten types computed just above, that it would not seem as likely that the number of modified electrons would still be counted as the number of ways that 3 things can be chosen from 5.

8 Created space potentials and emergent energy anyons we think affect all physical systems today

“The physical system cycle here is the mass energy ratio to the photon that is generated by the shell movement of electrons, the mass energy of the positron+electron has a 33 ratio to a given photon as produced by a shell electron jump. Particularly from shell to shell, the movement of electrons either inward or outward, the breathing of the atom for the transition to the molecular level, the electron fundamentally is moved by the anyon wave action, the virtual phonon. The anyon zone within the atom is between the nucleus and the shell. The breathing here is from 4D, the etheric, so fundamentally the electron is guided outward into its atomic structure and complex molecular structure by the action of the anyon. The etheric or anyonic force field is the in-hale or the inhale; the electromagnetic field is the exhale. These two working in concert create force fields of two different types which make the atom stable. The electron can be influenced by all kinds of energies and effects, but its fundamental position in the molecular structure comes from the anyon behavior.” (that conventional physics does not today recognize; interpreted from #31 of [1])

“As electrons go from outer shell positions to inner shell positions, they temporarily distort their orbits. This is much in the manner of a comet. The electron flares into brilliance and becomes a mass energy particle. That is, it goes into the etheric 4D and can change and alter its programming upon return to the electron shell. This is a dynamic state. Those electrons have three vectors then: electrical, magnetic, and etheric. Fundamentally, the magnetic vector is related to the neutrino force field. This is because a magnetic field is related to the property of spin or rotation. Anything in a magnetic field will spin. The multiplicity of spins can be coordinated with the imposition of the electric vector at certain angles. At the moment of the intersection of these, that is, the spin rate of the magnetic vector with the positioning of the static electric vector, there occurs the spin flip, which is nothing more than a repolarization of the electron field. The electron momentarily dips backwards into a figure eight as it zips around the nucleus. This figure eight, which is then polarized and repolarized according to the magnetic and electric vectors of each one, creates the force field of a molecule.” (condensed from #37)

So ‘sound’ travels between K-shell and nucleus via these 4D electron orbits! And we now make the conjecture that the emergent energy of the 3D→4D change in the 3D electron of 100 ultimatons transforming into a 4D (\subset cosmic-7D) modified electron of less than 100 ultimatons, is what actually gives rise to this atomic anyon zone. I think that the old Schroedinger approach [9] to electron internal geometry is slightly interesting for this section.

“The bestowal of cosmic force, the domain of cosmic gravity, is the function of the Isle of Paradise. All original force-energy proceeds from Paradise, and the matter for making of untold universes now circulates throughout the master universe in the form of a supergravity presence which constitutes the force-charge of pervaded space.” [139C] “The power charge of the superuniverses consists of three phases of energy of ten segregations each.” [321D] “The power centers and their subordinate controllers are assigned to the working of all of the physical energies of organized space. They work with the three basic currents of ten energies each. That is the energy charge of organized space.” [323D] (one current for each of direct space, inverse space, and superspace, or as it says in the Urantia Book, “physical, mindal, and spiritual.” [24C]) “The openly recognized transmutation of space potency into primordial force [vortices] is the primary differentiating function of the tension-presence of the living Paradise force organizers” [469D] (calculus by command). Indeed, it is very illuminating as a student of the cosmos to become aware of “the mathematics and premathematics” [1146C] of the many primary light (or primordial force) vortices being used in our solar system, like the “prana” of the next section!

9 Prana as an almost living physical energy, helps us to review section 1, and compare all subtle (“shadow”) ‘particles’/forms

Why does the sea of subtle energy that is all around us, that we call *prana*, need to be constantly renewed from space above our atmosphere, and how does prana tie together all subtle particle forms, including the ultimatons? I find that the best preliminary definition of prana comes from p.65 in Christopher Hills [10], and prana is there said to originate largely from the East→West flow of electrons through the high energy protonicity of the Van Allen radiation belts, although some prana comes from the Sun.

So we will assume here that what happens within the Van Allen belts, is that recently-formed electrons from the arrival of ultimatons from space where they have recently formed in the ocean of emergent-puissant energy, still have the continuing presence of the power centers and their associates, in liaison with the physical controllers, because these in a sense are *virgin* electrons that have not yet been part of any atomic system! As soon as any of these electrons become part of an atom, then these power centers withdraw from them, and ordinary linear gravity becomes operative for that atomic system [473A]. Otherwise, the electron continues to dive in toward protons and other positive ions, and if it escapes capture the electron eventually splits into a dual primary light vortex, like that drawn in Fig.2, with accompanying electron neutrino and anti-neutrino, which is what prana consists of [1], #15. This is a sea of almost living energy, this sea of such neutrino pairs and their dual primary light vortices, which some ascetics in India are said to be able to almost live on exclusively! And the ancient Fire, Earth, Air, Water, and Prana students represented Prana by the dodecahedron [11].

But we want to use this knowledge of the sea of prana to study how the electron-neutrinos, the biophotons (of the dual vortices), the gravitons, the electron-tachyons, and the ultimatons, are all closely related! For example, #16 in [1] says “the positrons breathe from this prana, and then above the speed of light, the gravitons and the electron’s tachyon also breathe from this prana.” The positron we noted is a subtle form because it’s only here temporarily from the anti-matter universe, but why would it (and not our electron), the graviton, and the tachyon all need to breathe like this? Well, we note that the neutrinos, with the positron and the tachyon, are together inside the neutron, where #12 of [1] says that they are complexly related to the graviton, but this is just a hint. Eventually (Fig.10, #159), we learn that all particles breathe constantly at $> 10^{30}\text{Hz}$!

Breathing is defined as in and out through the neutrinos, or an alternate expanding and contracting with the idea of pulsing to change or evolve form. We presently live in a physical world where energy and momentum make it easy to evolve things, but in a world without energy where there is only information and form, like the morontia reality, breathing is usually the only way to evolve a form. In our 3D physical world, most breathing methods would destroy us, because they’re too nuclear-connected. Using the neutrinos is gentle enough to make breathing practical even here. I think that the third gas used in the morontia air for breathing there [520D], might be like this, i.e. like our prana as an atmosphere of pranic neutrinos. You see, the real 9 types of neutrinos are subtle particles that have never been detected yet in this civilization, and only 3 types, those related to the leptons, are thought to have been detected because in each of these 3 cases, the small mass but very high magnetic moment of the lepton made it possible to detect a certain direct-spacetime *c*-velocity representative-fragment, erroneously named as the actual neutrino. I try to make this clear in my paper [6]. The breathing of the prana by the subluminal positron in #16 might be via these directspace fragments, but I feel fairly certain that the prana breathed by the graviton and the tachyon have to be the actual neutrinos, which are always faster than light. I don’t think the ultimatons themselves breathe anything, because even when they are overtones or

Table 1: Comparing \tilde{e}^- and five main subtle (or shadow) grid-like ‘particles’ under study.

‘particle’	#ul	spin	mass	charge	types	field	space
modified e^-	96	$\frac{1}{2}$	$\approx .5 \text{ MeV}$	-1	10	EM-1	4D \subset 7D
biophoton	4	± 1	$.321\text{eV} \neq 0$	0	$10, \infty$	EM-2	$3\frac{1}{2}\text{D}$, 7D
neutrino	$\geq 4 \text{ vtx}$	$\frac{1}{2}$	$.321\text{eV}, 0$	0	9	vortex	7D + superspace
graviton	8 pts	2	0	0	linear+	grav.enrgy	superspace
tachyon	8 pts	1	0	0	electron	EM-2	inverse space
ultimaton	1	$\pm \text{any}, 0$	0	0	1	$\approx \text{EM-3}$	7D, anti-univ.7D

super-anyons they are still just mathematical subtle ‘particles’. However, the electron and nucleons breathe neutrinos which have simple string theoretic forms that we review in eq.(6) below.

We list in Table 1 what we think that we have learned about each of these five subtle or shadow ‘particles’. The biophotons are 4-ultimaton tetrahedra of any (“Fire”) energy, but of spin ± 1 , so that two of these can combine to produce either a graviton of spin 2, or a tachyon of spin 1. Biophotons can also transform back into the dual primary light vortices of the neutrinos, which are the building blocks of the supernal. The biophoton, as emitted by all biosystems, carries information, and in the sense that our physical matter is condensed photons, it seems reasonable to conjecture that morontia materials are condensed biophotons. In fact, since quarks are also said to be harmonic organizations of mass and energy in the physical world (#53 in [1]), it may be reasonable to expect that the 100 unique energy organizations [541D] that essentially are added to our 100 chemical elements, might be used in the morontia realities to produce morontia bodies and cities that are somewhat similar to our physical ones. But building additionally with form is different than building with only energy-controlled orbits, and we saw above in this section that the ultimaton is frequently associated with energies that are thousands of times higher than the highest electromagnetic energies. Perhaps the morontia ‘positron’ of sections 6 and 7 is also usually much more active and higher-dimensional than our physical electron, making the morontia realities seem even more remote to mortals in this superuniverse than we might expect (compare with [520A]). The capital of our local system of Satania, Jerusem, probably could not as easily be its size of about 100 times larger than Urantia [509A], if it were physical instead of morontial!

In [6] an electron was found to breathe the (minimal, rather than maximal) neutrino forms

$$\begin{aligned} \text{the electron breathes: } (4^{13}, 3^{12}, 2^{12}) &= (4^{12}, 3^{12}, 4^{12}) + (4^{12}, 2^{12}, 4^{12}) = \bar{u}\bar{d} \\ &\Rightarrow 1.4788\%(.51099906\text{MeV}) \end{aligned} \quad (6)$$

where $\mathbf{w}^n \equiv (9604/w)w^n$ means a 9600-type body, i.e. not $w^n \equiv (7203/w)w^n$ or 7200-type bodies, and each grid lattice site amounts to $E_o = 3.18496366464 \times 10^{-12} \text{ MeV}$, so this implies a 1.4788% binding energy. We wanted to mention this as a breathing example here, because we learned that the neutrino forms of type 2, 4, 8, ... are always in-breath or forcefield energizing types, and those of type 3, 6, 9, ... are always out-breath or electromagnetic relaxation types (also #17 of [1]).

Fitting as many grid sites as possible into $T_7^{16} = 7^{16}$, the nucleons breathe the neutrinos [6]:

$$\begin{aligned} \text{the proton breathes: } (2^{32}, 3^{22}, 2^{32}) &+ (2^{32}, 3^{22}, 2^{32}) + (2^{32}, 2^{32}, 2^{32}) = u\bar{u}\bar{d} \\ &\Rightarrow 1.655\%(938.27231\text{MeV}) \\ \text{the neutron breathes: } (4^{17}, 3^{20}, 4^{17}) &+ (4^{17}, 4^{17}, 4^{17}) + (4^{17}, 4^{17}, 4^{17}) = \bar{u}\bar{d}\bar{d} \\ &\Rightarrow 1.635\%(939.56563\text{MeV}) \end{aligned}$$

10 Three dimensional ‘modified electrons’ by splitting into octahedral (40 ultimatons) and dodecahedral (60 ultimatons) “electronic units”, which then produce pranic neutrinos

We believe that modified electrons can also be three-dimensional, because the splitting up of a non-atomic electron to produce prana, as in section 9 above, appears to pass through a 3D modified electron fragments stage, as follows: Notice that “the loss of one or more ultimatons” [476D] can also cover the case of a simple splitting into $100 = 40 (5 \times 8) + 60 (5 \times 12)$, using the 8 equilateral triangular faces of the octahedron (“Air”) and the 12 pentagonal faces of the dodecahedron (“Prana”). When I first thought of this, an angel telepathed: “I don’t think this [combination] would sound too good!” So then I realized that waves and resonance are still at work in making all of these structures, forcing the structures and geometries to be all the same or at least very compatible with each other within each “electronic unit” or fragment. But these fragments are probably not ordinarily stable; however, the power centers and associates in liaison with the physical controllers are able to help them to form, split apart, and begin the generating of the primary light dual vortices and neutrino pairs that form the prana, as explained above in section 9.

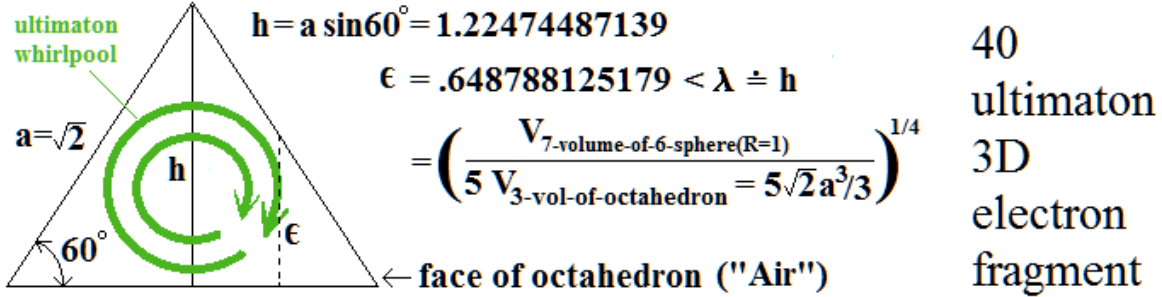


Figure 8: The simplest fit of the 5 octahedra into cosmic 7D’s 6-sphere, is less than the ultimatons’ anyon wavelength λ , for each of the 3D ‘modified electrons’ of $5 \times 8 = 40$ ultimatons, but helps make pranic neutrinos which are breathed by all forms and particles.

For 6-sphere radius R , its 7-volume $V_7 = \frac{16}{105}\pi^3 R^7$, and for the octahedra of edge length a (where $a/\sqrt{2} = R = 1$), its 3-volume $V_3 = \frac{\sqrt{2}}{3}a^3$, so we would like to have five of V_3 spaced apart by four 1D-extensions, each of length ϵa to fit up to V_7 . This will mean that approximately,

$$\left(\frac{V_7}{5V_3}\right)^{1/4} = \left(\frac{16}{105}\pi^3 R^7 / 5 \frac{\sqrt{2}}{3}a^3\right)^{1/4} = \left(\frac{4}{175}\pi^3\right)^{1/4} = \sqrt{2}\epsilon, \text{ if } a/\sqrt{2} = R = 1,$$

which yields the approximate value $\epsilon \doteq .648788125179$ as illustrated in Fig.8. So $\epsilon/h \doteq .529733285956$ is smaller for this type ‘modified electron’, than ϵ/h of Figs. 5 and 6; we think prana benefits.

The circumscribed dodecahedron has $a = 1$, $R = \frac{\sqrt{3}}{4}(1 + \sqrt{5})$, and $V_3 = \frac{15+7\sqrt{5}}{4}a^3$, so we would like to have five of V_3 spaced apart by four 1D-extensions, each of length ϵ to fit V_7 . This will mean that approximately,

$$\left(\frac{V_7}{5V_3}\right)^{1/4} = \left(\frac{16}{105}\pi^3 R^7 / 5 \frac{15+7\sqrt{5}}{4}a^3\right)^{1/4} \doteq 1.06944427113 \doteq \epsilon,$$

as illustrated in Fig.9. So $\epsilon/h \doteq .694967015427$ so that comparing to Figs. 5, 6, and 8, it seems possible that this $\epsilon < \lambda$ also contributes to being off resonance and hence unstable.

and the frandalanks, that manipulate even the ultimatons, would be needed for, if they were not needed for such a job as this? That is, the individual cycles of breathing-in pranic neutrinos (force field energizing, according to 2,4,8 harmonics), followed by the breathing-out period (electromagnetic relaxation, according to 3,6,9 harmonics), should be forcibly synchronized to the ultimaton involvement or interaction cycle, and hence a phase of existence for each visible reality. I.e., outside each of these periods of correct phase, an ordinary being within that reality would not be able to experience anything. I.e., every individual ultimaton within all materials of a given reality must be carefully and constantly kept in phase with all the rest of that reality; and we now know of what appear to be at least three such separate realities: Our physical universe, Midwayer reality, and Morontial existence. Figure 10 then shows how the conjectured ultimatonic (and associated primary light dual vortex) cycle might then be divided up into three separate common-phase regions!

Are there easier ways, for example for a child born 37,000 years ago to Adamson and Ratta [861D] to be often invisible?

“Every fourth child born to them was of a unique order. It was often invisible. Never in the world’s history had such a thing occurred.”

And 2000 years ago when midwayers were asked to roll away the stone from Jesus’s temporary tomb, the watching Jewish guards and Roman soldiers on duty fled in great fear! [2023B]

Of course the reason that any morontia materials should be kept invisible to us in the physical world and invisible even to the midwayers, who join us on the Mansion Worlds for the ascension career, is that morontia \subset antimatter-universe inverse-space. [502A,D], [2027A], #159 in [1]

12 Matter and antimatter must be kept safely separated with curvature and the Riff boundary layer energy

Notice that the two, matter-type-spin ultimatons and antimatter-type-spin ultimatons, are not able to actually change one another, since the outward moving (anti)neutrino, which accumulates the force to hold the two gamma-particles together when an electron annihilates a positron for example, doesn’t modify ultimaton structure, but only electron and positron structure. The reasons for this are closely related to the fact that the neutrinos (as modified only by the pulsations from God’s Mind) give completely the structure of supernal space (the “neutrinos pump through the primary light vortices”, which are pumping this way, according to Fig. 10 all the time, as long as the physical matter or morontia form exists), and these divine pulsations apparently leave all ultimaton structure intact, changing only the neutrinos themselves since these are built from a version of the electric and magnetic field lines that here are parallel to one another (transcript 21 of [1]).

But what about for an entire universe or superuniverse? Well, the term “superuniverse”, we have come to realize, actually refers to all matter universes, plus all antimatter universes, plus all parallel realities of both! Does the reader really understand what parallel realities are? Any two parallel realities are of course too different to permit one to effectively use such information for making accurate ‘predictions’ within our own reality. Also, there is evidence that the use of micro singularities in machine-assisted time travel from one parallel reality to (necessarily) another, damages considerably the human immune system, and page 386 in [12] is even much worse.

We know from [12], page 455, that each spiral galaxy has in its (relatively small and localized) center something that is called the Riff which is a white hole of enormous output energy from the flux (between the cycling phase-separations of Fig. 10) between the matter creation and the nearby antimatter creation (containing morontia reality). So, it’s this, and curvature [13] (like general relativity, with mass from E/c^2) that builds the needed barrier to keep matter universes and antimatter universes well separated (but at the Riff, only “over millions of miles” [12], p.456).

APPENDIX 1: Warning about intellectual poisoning, and then examining a few related further mysteries

If you the reader have not really understood the mathematical reasoning in this paper, then applying it to try to better understand books like the Urantia Book, could be fruitless until you have mastered the basic ideas here. You might consider trying harder, and being prepared to spend many years learning. When I, as a graduate of MIT and Brandeis University (having withdrawn from their Ph.D. programs in 1969, to try to understand how the supernatural things could be happening), first began reading the Urantia Book in 1973, I experienced a very dark and heavy weight upon my mind concerning the information that I was trying to read and relate to both the Bible and my recent technical and mathematical education! But I had immediately gone out and bought a Urantia Book in '73 and began very slowly over the years to assimilate its information. Meanwhile, I joined the Mormon Church, the Rosicrucian Fellowship, and the Theosophical Society (receiving a lot of help from their literatures), then went to Summit University under Guru Ma (Elizabeth Clare Prophet, who warned me that she did not believe that the Urantia Book was even true!), studied the Unarius books (many of which were generously given to me by Ruth Norman), and studied by mail with the Star System Sirians (the return of Quetzalcoatl, The Bennu, from 1987 to 2011), and then in 1997 joined Lynn Charlson's research group in Minnesota (the continuing of Jesus's encouragement, made 2000 years ago to Nicodemus and the Centurion Longinus). Certain mathematical discoveries, related to PFLs and Virasoro algebras, were made and applied to the Qabalah in the year 2000 while staying in Mr. Charlson's guest house, but I did not see then that they might be important to the ultimatons until this year.

The danger is, you see, that badly applied intellectual powers can poison your spiritual progress and your spiritual attainment! Jesus taught his disciples that a mere intellectual experience is not the way for you to reach sonship with God, but that you should strive unceasingly for that real experience of a loving God reaching out to you, to make you his son! [1733D]. Thus our Thought Adjuster must be a part of the spiritual path forward, and so this certainly should be a clear enough path for us to follow!

"Science is sustained by reason, religion by faith. Faith, though not predicated on reason, is reasonable; though independent of logic, it is nonetheless encouraged by sound logic. Faith cannot be nourished even by an ideal philosophy; indeed, it is, with science, the very source of such a philosophy. Faith, human religious insight, can be surely instructed only by revelation, can be surely elevated only by personal mortal experience with the spiritual Adjuster presence of the God who is spirit." [1137D]

So, you can understand why, if the prepersonal Thought Adjusters did not come to indwell each mortal mind, from about age 5 or 6, and for the rest of that mortal's life in the flesh [1176-1240], that we would not stand much of a chance of gaining eternal life (survival)!

13 What I believe about the history of the last 252 million years, one mortal type elsewhere, and how prepersonal Adjusters might function

We know from [12] that the great pyramids in Egypt were built 252 million years ago, not just a few thousand or even a few hundred thousand years ago as the unenlightened think. And the education the unenlightened is missing is of course that the subtle energy surrounding the pyramids until just a few centuries past was so well-formed (before these well-made stone structures were mistreated)

that subparticle energies kept weathering and aging forces at bay. Even only 29 million years ago the Benfyvees from Australia reported (p.335 in [12]) that their subtle energy field was still so strong that it killed many of their people who tried to live close to the beautiful pyramids. Why these ancient people seemed to experience reincarnation, while for us it does not seem to happen [528B], is a real mystery, but I have faith in God’s plan of the use of the Mansion Worlds! The frequency barrier, and/or their open-mental states [12] don’t change anything. For example, what might a morontian (or higher) be like to have some of his mortal body memories placed within a selected mortal child? The contemporary case of Alan John Miller in Australia is particularly puzzling in this regard, since it is fairly clear to me that he found some of Jesus’s human body’s memories within himself, leading him to his present-day activities. If permission to do this came through the child’s Thought Adjuster, then of course we can be sure that God is definitely involved, but should we be using the term “reincarnation”? I also believe that the destruction of the planet Maldec by a misuse of the largest Egyptian pyramid also caused the greatest mass extinction event that our solar system and the Earth have so far experienced, and that future versions of the Urantia Book will almost certainly be more easily seen by Urantians to complement this history and much more (although I can see considerable implied agreeing between these two books right now⁶).

On page 109 of [12], for example, we learn that the “planet” Nodia has 26 times the surface area of the Earth, yet its gravity is only about like that of Mars. To me this suggests that Nodia is indeed an architectural world; but I think we can be fairly certain that even though on Nodia they say that the off-worlders outnumber the Nodian natives, I think that Nodia is probably not a system capital, like Jerusem, etc. I.e., the “magnetic field” the Neptunian, Thaler, is talking about of Nodia here, isn’t what you might think; it’s not like what moves a compass needle, that e.g. would never be moved by it on the planet Venus, but gravity is formed in supernal space by combining a subtle or EM-3 field of inverse space with a weak nuclear field of direct space.

Whether the prepersonal Thought Adjusters actually use the very long control-links to ultimatons, neutrinos, and anu, for example from Uversa or even from Divinington, to dwell within the minds of mortals such as ours on Urantia, without actually coming here, I think is very possible, but what difference could that type of arrangement make? It would clearly make no real physical, morontial, or spiritual difference at all! Maybe it would just make them a little more mysterious, and more invisible to everyone, but I think more exciting in the long run!

APPENDIX 2: Our future morontia body might be able to have a very bright aura, that may use the special properties of the morontia ‘positron’ that we think could be a tachyonic subtle form

“The Master Physical Controllers and the Morontia Power Supervisors are able so to modify the revolutions of the primary units of matter and at the same time so to transform these associations of energy as to create this new substance.” [541D] But why do we think that the Archangel Raphael transcripts quote, “silicon/selenium/germanium type of solid-to-ionic form and body” (#15 in [1]), really refers to our future morontia body that is made of this new substance, such as on the Mansion

⁶For example, there had to be two architects referred to as “Imhotep,” one fairly recently who freed the soul of Marduk from the great pyramid ([12], page 269), and the designer 252 million years ago for the Maldecians ([12], pp. 182, 407, 493), for “these first stone buildings in” Mir (since the land we call Egypt today was called “Mir” that long ago). Also, “Andite” [894D] is probably mentioned by the Archangel especially for the most recent Imhotep, since both Andites and Maldecians were a blond, aggressive race, the best of whom befriended the Nodians (“Nodites”), but whether this would be acceptable in a book published in 1955 when the details about the planet Maldec, and what really caused the end of the Permian geological period, were not yet known to us mortals, is not for me to say. This is true especially because of “the limitations of revelation” [1109]; we are grateful for what we have received.

Worlds? Well, consider the other transcript references from this same source [1], for this type of solid-state body. We list some of these quotes next:

“You may evolve a body of silicon to replace carbon, and its existence through time would be in terms of millennia instead of years. This, again, is related to velocity and distance and time. You see, they are all interchangeable factors. You merely have one perspective in your dimension, the relatively short one, and the relatively limited consciousness. As consciousness expands to the mental level, there is a consciousness or awareness of the entire solar system and the life forms therein.” (from #7)

“There are three components to the etheric system, viz. the anu, and the dual components of the spin vortexes. That is, there is another vortex, a so-called dark vortex, which is exactly opposing this vortex. On occasion, the dark vortex is inside the light vortex, or it may be outside, or it may be at some angle. This is configured to the form of space. Let us say the highest possible extant system is the system of the form of space and color of the abstract mind. Below the system of form and color of the abstract mind lies the system of the vortexals or the etheric system, invisible to your eyes, however completely visible to ours. You may see, if you look into the third eye, vortexes pointing down into all atoms. They drop into all atoms and point down into them at many angles, depending upon the form of the abstract mind. Many colors determine the diameter of the termination of the vortex, according to its frequency. That is, the vortex terminates with a size in space. This begins the size of the third dimension, which is the third system. So there are three components to the vortexal, etheric system. That is, the vortexes are in the ether. Above the ether of the abstract mind, again, there is only geometry. This is greater than the third dimension, a seventh dimensional geometry and color. We referred to this previously as the grid or the macro. This is the abstract mind. [i.e., for him, the cosmic 7D, the grid, and “abstract mind,” all refer to the same.] It is the alignment of form and color. Below this are the vortices. (Again,) neutrinos pump through the vortices. The vortex is a frequency construct. It contains all three frequency constructs: the phonon, the photon, and the ohnon. These are its mathematical frequency relationships. Everything is frequency relationship. The ohnonic frequency (the high ohnons [i.e. the ultimatons as anyons, corroborating the use of eq.(1)!]), are the only ones capable of reaching the abstract mind [i.e. the cosmic 7D]. The photon, specifically the biophoton, is defined as the terminal diameter of the vortex. So, all vortices terminate with the biophoton. It is the main carrier from the etheric into this dimension. The biophoton has the programming. Half of it is of the dark vortex; this vortex is disappearing matter, or anti-matter. It also produces the force fields. All force fields are wanting to compress matter to its state of disappearance - that is, to infinite compression. This occurs down inside the anu, which is the smallest etheric component in the third and fourth dimensions. So, let us review again. The vortices of large size compress to a size that is a photon of visible light. This is only the visible light of the biophoton. It carries the program of the complete system. We could look at it and see the vortexes and know the programming content therein. So we have been talking about trying to figure out how we can look at those minute, small bits of light. This is what occurs upon the movement of energy. That is, the etheric is dynamic now. In the abstract there is only form and color, so it is of a static nature. Actually, it does move and change through great eons of time. Nonetheless, it can be considered virtually static. These are evolutionary cycles. For instance, the abstract of a given soul formation into a body is a given. There is very little basic content of life that can be varied to any great degree. Upon movement, the soul body then does a slight wiggle and the abstract mind adjusts. This is the nature of the movement of the abstract mind. It only occurs upon the life cycle. The vortexes, however, pumping constantly, are dynamic. So, they begin with low frequencies at their low ends and this is, of course, what we are trying to build devices for.”

“If you were residing in more solid, silicon, germanium-based bodies, you would necessarily need

the higher frequency gases such as krypton and xenon. So, it is a question of what portion of the program you are in, with respect to the biological construction of the atomic molecular complex.” (from #43)

“...it is necessary for us [KOH LAN speaking] to transduce entirely from a mental dimension - that is, descriptively. All information ultimately goes through personalities within the astral [morontia] world who then conduct, contact, or consult the personalities in the physical world. In other words, we are working through an astral entity....known as Marcel. [Marcel Vogel had worked with Mr. Charlson and Bob Crane, the channel, shortly after these sessions began, but passed on soon afterward in California.] That is, it is a necessary transduction, as we are no longer discussing theoretical physics. We are discussing applications to real, living systems. So the closer you are to this, the more you must have someone who has been closely associated with a real living system - that is, a body. We have not been in carbon-based bodies for very many thousands of years, so we have lost this contact. We are in a transmuted or silicon/germanium-based body.” (from #51)

“It is called isotronic matter. This matter has been described many times as an extension or a higher form of carbon matter. It is essentially matter of a more complex and extended vibrational nature. It mimics the form of hydrocarbon matter, however relies upon other types of atoms particularly silicon and germanium for its vibrational structure. The vast temples of Atlantis were built from this matter so that the individuals working there in their various functions could have an extended lifetime, and also be aware of this [and] communicate with beings on the other side such as this communication. In this case, whole groups of people could actually see beings on the other side, many of which they had been related to in this lifetime, but who had moved over.” (from #120)

However, I wonder how close these Atlantean temples, where aged persons could extend their mortal life, and make a preliminary contact with the Mansion Worlds, were to the future Morontia Temple that Urantia will someday have [622], when Jesus returns as he promised. Why did Atlantis collapse, if it was moving that fast toward the future age of light and life? Was it able to function correctly in moving souls along toward perfection in the best way? How could our lowest-level existence make the needed improvements that fast in the overall process? And a similar warning can be made about isotronic matter, which ([1], #69 from ISH WA TEL) claims is necessary for every mortal civilization, that possesses our present level of technology, to discover and develop in order for them to survive as a civilization. Wouldn't the morontia reality existence be logically the best life-period and place at present for the correct education about, and the correct use of, such advanced science, advanced technology, and advanced power? Why would they think that our present-day mortals could be trusted to handle the advanced things that well?

However the conclusion of #173 agrees with me. Mr.Charlson asked if he's to understand that this isotronic system is not going to be revealed to us, and the answer was: “This is correct. What will be revealed is how to move in this direction. There is no other way, as you must move slowly through the elements given in this certain direction, and this will reveal the nature of the isoton. In fact, much of it has been revealed and exists in these sessions [1], but only sporadically and at certain times. We have mentioned, for instance, organizations of matter, and new organizations of chemical charts, as well as atomic charts. These reflect the programming of the isoton, and also reflect how matter will be reassembled according to different valencies than existing matter, into compounds, and chemicals, and crystals, and so on, which have some degree of this programming. What cannot be revealed is the more advanced nature of this... It is too far to move to the level that was demonstrated in Atlantis. It amounts to thousands of years ahead of your civilization.”

Perhaps we will go on into the more advanced morontia life, while continuing to try to make physical atoms behave more like morontial forms, and we know that the planets eventually reach the age of light and life! [621-636]

14 A few more considerations

If we understood better the neutron interior and the inverse space of our own matter universe, then we could move over into the antimatter universe and understand better the corresponding direct and inverse or morontial space there too. The antimatter direct space, where a few temporary visitors arrive precariously and occasionally from our universe, might be a kind of protective moat or armed garrison around the ascension career activities of the morontia reality interior. #12 of [1] claims that the graviton (which #16 says is the shadow (or subtle ‘particle’) of the positron), is also inside the neutron with the electron’s tachyon. So is the morontia ‘positron’ also a graviton, or as I suspect is it instead only a tachyon over there. Also, we know that a form ‘particle’ must travel faster than light, and therefore must have zero mass, but the quantum state formed by it would seem to need non-zero mass, like morontia materials, the neutron’s ‘electron’, etc.

The best way to form and study a graviton is via #295 of [1], where it says, “What occurs in the graviton is that if the programming of two photons is exactly correct, and they have spin one, plus they have all eight dimensional parameters of their electric and magnetic fields within all of the EM 1, 2 and 3 aligned, they will completely cancel by one another and create a gravitational scalar or a graviton with a Spin-2. This is a very rare occurrence and it cannot happen under a normal random photon situation - that is, an ordinary situation where photons are generated. Nonetheless, it is the manner of the generation of the photon. I.e., the two photons again configured exactly correctly with the basic EM programming, will annihilate to produce the graviton.”

So we want to try first to deal with this problem of graviton structure on a Platonic geometric basis as follows: First, note from the work to derive Table 1 of section 9, that the biophoton was seen to be an ordinary 3D tetrahedron, with ultimatons normally forming the no-Higgs-mass-producing ultimatons anyon whirlpools on its 4 non-paired triangular surfaces (and the biophoton velocity is always $\approx c$, but having four non-rotating ultimatons vertices might be just one version of an ordinary photon). Two of these biophotons, with one from antimatter, can completely cancel one another if their total of 8 ultimatons whirlpools, that we understand below can be super-anyons, interact with the right pairing on an octahedron to form only $\omega = 0$ ultimatons. By the ultimatons Rule that we employed for eq.(1), we see that the necessary passage to the dual Platonic figure, the cube (“Earth”), gives the superluminal result expected for the graviton’s ultimatons structure (and also for the tachyon’s ultimatons structure, where the graviton’s velocity in superspace can be even approaching infinity). But no experimental data yet exists today to test this result, and the graviton itself has not yet been detected in any way by experimentalists in our civilization.

Similar use of the Platonic geometric results for atomic physics situations that we have discussed in this paper (such as the shell electron going from outer shell position to inner shell position and flaring into brilliance like a comet as it temporarily becomes an etheric 4D or modified electron, that was quoted from transcript #37 above in section 8), probably could be advantageously applied in difficult calculations that presently make no use of such geometric structure and reasoning that extends considerably beyond present-day understanding and expectations of Urantian physicists! When will these university personnel come to this greater knowledge and realization or belief? Certainly such progress would be necessary before the planet reaches the age of light and life!

In this paper, we are basing the ultimatons’ ‘anyon overtone’ or superlight (i.e. $v \gg c$) rotational-structure on the following few excerpts from the transcripts [1]:

“It is what is called the longitudinal component, which is technically speaking the momentum or the force or gravity component. It is the graviton component. This is from 4D and it is caused by the change in velocity and acceleration of the light wave. The light wave, as you know, always travels less than the speed of light, depending upon the density of material, however, it can be accelerated within free space, past the speed of light.” (from #220)

“Prof. William A. Tiller has been led within a series of experiments, which he performed in his laboratory in the West, to examine the superlight effect. It is what he calls “extraordinary light ray or extra light ray,” which is, in reality, a superlight ray. It is based upon a more traditional description of the flow of the superenergy, which could not be visually seen, except within the third eye [14]. There are huge amounts flowing through this room constantly of this superlight. Indeed, the particles known as neutrinos are superlight, and are forming through all matter at all times.” (condensed from #220)

“The ultimatons’ anyon wave nature has two fundamental characteristics: one at the speed of sound and one at the speed of light. The speed of light can modulate above the speed of light, eventually attaining what you might call the speed of thought at one million times the speed of light. Although this is a very high velocity, more commonly there would be velocities of perhaps one thousand times the speed of light. This is in the nature of the harmonic overtone structure to the anyon.” (and therefore to the ultimatons; interpreted from #287)

References

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† [467D] for example, means bottom quarter of page 467 in the Urantia Book, www.urantia.org

‡ (written mostly in the 2000 - 2006 period, such as from [3].)

- [1] Lynn Charlson, moderator, and Bob Crane, channel-editor, Life Science Foundation and Durance Corp. 1988 - 2000 Transcripts, posted at archive.org/details/subquarkbiotronics, given to Lynn Charlson’s research group under the auspices of Archangel Raphael (fifth Archangel of Science and Healing), and contains mental messages from morontial Atlanteans who were the students of the off-planet overseers about 12,000 years ago. I.e., a continuation of the Mystery School begun when Nicodemus and Joseph of Arimathea came forth from the Sanhedrin to be taught by Jesus.
- [2] From an untitled and unpublished 1978 channeled paper on primary light and UFOs by Robert W. Crane.
- [3] L. E. Johnson, “Quantum mechanics becomes completed in nine ‘folded dimensions’ plus two independent time variables” (publication also not attempted, 2006).
- [4] Larry E. Johnson, *Mind-grid interactions*, a personal write-up or book that grows very slowly over the years.
- [5] An approach partly channeled, and suggested personally by Bob Crane in 2006.
- [6] “OurSpacetimeTrineSystem-v5.pdf,” found at archive.org/details/TheRegalus
- [7] Especially transcripts 80 of 10/28/94 and 300 of 7/10/00 from [1].
- [8] C. W. Leadbeater and Annie Besant, *Occult Chemistry*, third (1951) edition
- [9] A. O. Barut and A. J. Bracken, “Zitterbewegung and the internal geometry of the electron,” *Phys Rev D*, Vol.23, #10, 15 May 1981.
- [10] Supersensronics by Christopher Hills, University of the Trees Press, 1985.
- [11] Drunvalo Melchizedek, The Ancient Secret of the Flower of Life, Vol. 1, page 167, 1998.
- [12] Through Alien Eyes, 2000, by Federation telepath Wesley H. Bateman, LightTechnology Publishing, www.lighttechnology.com
- [13] Especially transcript 174 of 8/21/96 (Jesus’s 2002nd birthday), but also #159 from [1].

- [14] “Children as Subtle Energy Detectors,” p.24 in Science and Human Transformation by William A. Tiller, 1997.
- [15] “Ra-mathematics...pdf” and “HeavyProtons...pdf” at <https://archive.org/details/TheRegalus>
- [16] The PureBasic program find5-7D.pb that I used is listed below, but to start instead with $\{x_1, x_2, x_3\}$, change to: icos1(1)=1:icos2(1)=2:icos3(1)=3, and For i1=1 to 5:For i2=i1+1 to 6:For i3=i2+1 to 7

;FIND5-7D find how many 5 mutually-face-orthogonal non-permuted icosahedra result from cosmic
;7D, 6/15/17

```

Dim icos1(100):Dim icos2(100):Dim icos3(100)
CreateFile(1, "find5-7D.txt")
OpenConsole()
Delay(7000)
c=1
icos1(1)=6:icos2(1)=5:icos3(1)=4
For i1 = 7 To 1 Step -1:For i2 =i1-1 To 1 Step -1:For i3 =i2-1 To 1 Step -1
For j=1 To c
If icos1(j)=i1 And icos2(j)=i2 And icos3(j)=i3:Goto nexi3:EndIf
If i1=icos1(j) And (i2=icos2(j) Or i3=icos3(j) Or i2=icos3(j) Or i3=icos2(j)):Goto nexi3:EndIf
If i1=icos2(j) And (i2=icos1(j) Or i3=icos3(j) Or i2=icos3(j) Or i3=icos1(j)):Goto nexi3:EndIf
If i1=icos3(j) And (i2=icos1(j) Or i3=icos2(j) Or i2=icos2(j) Or i3=icos1(j)):Goto nexi3:EndIf
If i2=icos1(j) And (i1=icos2(j) Or i3=icos3(j) Or i1=icos3(j) Or i3=icos2(j)):Goto nexi3:EndIf
If i2=icos2(j) And (i1=icos1(j) Or i3=icos3(j) Or i1=icos3(j) Or i3=icos1(j)):Goto nexi3:EndIf
If i2=icos3(j) And (i1=icos1(j) Or i3=icos2(j) Or i1=icos2(j) Or i3=icos1(j)):Goto nexi3:EndIf
If i3=icos1(j) And (i1=icos2(j) Or i2=icos3(j) Or i1=icos3(j) Or i2=icos2(j)):Goto nexi3:EndIf
If i3=icos2(j) And (i1=icos1(j) Or i2=icos3(j) Or i1=icos3(j) Or i2=icos1(j)):Goto nexi3:EndIf
If i3=icos3(j) And (i1=icos1(j) Or i2=icos2(j) Or i1=icos2(j) Or i2=icos1(j)):Goto nexi3:EndIf
nexj:
Next j
c=c+1:If c>100:Goto enuff:EndIf
icos1(c)=i1:icos2(c)=i2:icos3(c)=i3
nexi3:
Next i3
nexi2:
Next i2
nexi1:
Next i1
enuff:
PrintN("max c="+Str(c))
PrintN(" ")
For j = 1 To c
i1=icos1(j):i2=icos2(j):i3=icos3(j)
PrintN(StrU(i1,#Word)+" "+StrU(i2,#Word)+" "+StrU(i3,#Word))
WriteStringN(1,Str(j))
WriteStringN(1,StrU(i1,#Word)+" "+StrU(i2,#Word)+" "+StrU(i3,#Word))
Next j
CloseFile(1):Delay(90000)
End

```